GOVERNOR ARNOLD SCHWARZENEGGER

July 8, 2010

Via electronic mail: imartinez@ntia.doc.gov

Mr. Larry Strickling
Administrator
National Telecommunications and Information Administration
U.S. Department of Commerce
1401 Constitution Avenue, NW
Washington, DC 20230

Re: Additional California Recommendations for Broadband American Recovery and
Reinvestment Act Applications for Round 2 – Public Safety Applications Granted Eligibility
Waivers

Dear Mr. Strickling,

Thank you for the opportunity to comment on applications pending before your agency for the
second round of broadband funding from the American Recovery and Reinvestment Act of 2009
(ARRA). These comments address applications from entities that recently received waiver
authority from the Federal Communications Commission (FCC) to use the 700 MHz public
safety broadband spectrum.

It is California's law and policy to bring our residents advanced communications technologies,
and this should begin with our state's first responders. California is grateful for receipt of the
FCC waivers for applicants in our state to use the 700 MHz spectrum for public safety. With
these additional National Telecommunications and Information Administration (NTIA)
Broadband Technologies Opportunity Program (BTOP) grants, California may lead the way for
public safety trials of LTE technologies.

California received two additional 700 MHz public safety broadband spectrum applications:
Connected Orange County (submitted late to the state) and Los Angeles Regional Interoperable
Communications System (LA-RICS) (filed with NTIA on July 1, 2010). California has reviewed
these additional BTOP applications consistent with our state goals. We are pleased to strongly
endorse both of these projects. Additional program descriptions are provided in the attachment.

Applicant: County of Orange
Application ID: 7615
Project Title: Connected OC (Orange County Regional Wireless)
Project Type: Comprehensive Community Infrastructure
Grant Request: $7,700,000

California strongly supports this application by the County of Orange, which builds on the region's recent wireless broadband feasibility study for first responders. This study identified a need for a regional, interoperable, high-speed data communications network for first responder operations, and this project achieves it at a modest cost with very broad participation by first responders in the area (local, state and federal entities). The state encourages this collaborative approach and pooling of scarce public safety communications resources. Further, this application proposes a Middle Mile and Last Mile approach to serve an economically distressed area of Orange County that contains 250,000 residents. The county has partnered with key educational entities to help achieve low cost broadband access ($15 per month) for these residents to encourage broadband access and digital literacy. The California Emerging Technology Fund has shown that communities with the lowest broadband penetration in our state are Hispanics, low-income people, seniors and people with disabilities. The project focuses on a low-income area and will help boost broadband adoption in this area.

Applicant: Los Angeles Regional Interoperable Communications System Authority
Application ID: 7835
Project Title: The Los Angeles Public Safety Broadband Network (LA-SafetyNet)
Project Type: Comprehensive Community Infrastructure
Grant Request: $171,574,912

California strongly supports this LA-SafetyNet application because of the complexities of serving this geographically challenging and large terrain for multi-jurisdictional, public safety first responders. While the grant request is large, this project is located in the second largest city in the nation. This region also routinely faces many challenges – from major earthquakes to large wildfires and other large scale public safety challenges.

Again, I appreciate the opportunity to comment on the applications you have received from the Golden State. I commend your agency's diligence and hard work in making these grants in a timely manner to benefit our residents in times of public safety emergencies and to create economic opportunities with advanced communications technologies. Thank you for your assistance on this matter.

Sincerely,

Arnold Schwarzenegger

DESCRIPTIONS OF RECOMMENDED BROADBAND PROJECTS

Applicant: County of Orange
Application ID: 7615
Project Title: Connected OC (Orange County Regional Wireless)
Project Type: Comprehensive Community Infrastructure
Grant Request: $7,700,000

Description:

The Connected OC Project builds upon the findings of Orange County's 2008-09 Wireless Broadband Feasibility Study. This study found the need for a regional, interoperable, high-speed data communications network for first responder operations. Before the Recovery Act, a key piece necessary for a regional strategy to public safety broadband was missing: how to interconnect all of the individual jurisdiction's current and future public safety networks into a larger, interoperable and better network. Connected OC has two core broadband components designed to leverage Recovery Act funding to address these needs:

1. Connected OC – Middle Mile Interconnection of Public Safety, Medical and Healthcare Provider Anchor Institutions:

For this component, the County of Orange will build and maintain a wireless, middle mile, broadband backhaul network that will interconnect the county's public safety agencies to each other and to local, state or federal computer systems and the Internet. The project aims to substantially upgrade service and bring county public safety institutions into the next era of networking. This project has as participants the following public safety entities:

- 16 county sheriff facilities servicing unincorporated areas
- 31 city police departments
- 3 county probation offices
- 6 county jail facilities
- Orange County Airport
- Orange County Transit Authority police
- Orange County Fairgrounds
- Orange County Fire Authority (serves unincorporated areas and contract cities)
- 1 University of California police department
- 1 community college police department
- 1 school district police department
- 2 neighboring county police departments (Los Angeles)
- 6 state community anchor institutions
- 10 federal justice agencies (FBI, DEA, INS, IRS, Secret Service, US Marshals, US Probation)

This public safety broadband network will consist of 80 point-to-point wireless links, capable of 50 Mbps each, using licensed microwave technology. It will support two-way data transmissions with enough aggregate capacity to support the provisioning of broadband service to all public safety agencies in Orange County. Local police, fire and emergency medical services will use it

as a gateway to extend the reach of their existing or planned 4.9 GHz public safety networks to neighboring cities, county, state and federal agencies. Looking forward, this technology will lend itself to interoperable connection with future public safety technologies, such as 700 MHz networks of the type being promoted by the FCC's National Broadband Plan.

2. *Middle Mile/Last Mile Wireless Broadband to Economically Distressed Areas (Red Zone Network):*

This component of the Connected OC project will build the necessary Middle Mile and Last Mile wireless broadband network infrastructure to provide low-cost Internet access to twenty square miles of economically distressed areas of Orange County, or the so-called "Red Zones." The Census Tracts in seven cities that contain significant Red Zone populations give a service area of 20 square miles and a combined population of approximately 250,000.

This Red Zone broadband network will use Wi-Fi (802.11x) and/or WiMax wireless mesh technology for middle mile and last mile connectivity. At 40 access points per square mile (assuming Wi-Fi), up to 800 access points will be mounted on available light poles, buildings and towers. Final design will be determined as part of the RFP process. A combination of wireless mesh networks and wireline circuits will provide the backhaul network. This Red Zone network will partner with the following community college and educational community anchor institutions: North Orange County Community College District, School of Continuing Education, Orange County Digital Media Center (NOCCCD) (Easygrant #6767), and Orange County Department of Education (OCDE) (Easygrant #4390). These entities will serve as connecting agencies to Orange County school districts and community college districts. They have applied for BTOP grants for Sustainable Broadband Adoption and Public Computing to support their many educational and workforce development programs. The County of Orange has agreed to partner with these anchor institutions by giving them access to the wireless broadband network they will build, extending the reach of their public computing centers into homes within distressed areas. Programs would include Alternative and Correctional Education, Outdoor Science, Regional Occupational Programs, Special Education, Child Care Services and Student Programs. The cost of the Red Zone Network is $3,300,000.

Based on the methodology suggested by President's Council of Economic Advisors (Estimates Of Job Creation From ARRA, 2009), the project will create the following number of jobs: 11 direct job-years and 109 indirect job-years.

Applicant: Los Angeles Regional Interoperable Communications System Authority
Application ID: 7835
Project Title: The Los Angeles Public Safety Broadband Network (LA-SafetyNet)
Project Type: Comprehensive Community Infrastructure
Grant Request: $171,574,912

Description:
The Los Angeles area is one of the most demographically and geographically diverse areas in the country. The region is home to 10 million residents from more than 140 countries who speak more than 200 different languages. Its geography includes mountains, deserts, valleys and 70

miles of ocean coastline. The elevation varies from sea level at the coast to 10,000 foot high mountains. The region is home to the second largest city in the United States and two national forests. The lives and property of the residents are protected by 50 law enforcement and 31 fire service agencies that use a variety of voice and mobile data communications technologies. Unfortunately, due to the variations in voice radio technology and spectrum, the ability of public safety agencies in Los Angeles County to talk to each other during routine or emergency incidents is limited. Additionally, many of the LA departments have deployed traditional public safety mobile data systems, but their limited bandwidth has restricted our users to simple character-based messaging and database queries, particularly by users in the field. Access to a highly reliable broadband data system is necessary to support the modern, data-intensive, situational awareness applications that are urgently needed by fire and law enforcement personnel.

The Los Angeles Regional Interoperable Communications System (LA-RICS) Authority was formed to explore the development of a single, shared voice and data communications system for all public safety agencies within the greater Los Angeles region. Initial feasibility studies indicated that by leveraging the various independent agency efforts currently underway, a shared regional communications system would not only be possible, but would best meet the needs of the entire regional public safety community. Consequently, the City of Los Angeles, the County of Los Angeles, the Los Angeles Unified School District and 82 other municipalities and public sector entities within the greater Los Angeles region joined the Authority. The purpose of the Authority is to construct, own, operate and maintain public safety mobile voice and data systems. A 17-member Board of Directors, comprised of first responder stakeholders from the greater Los Angeles region, governs the Authority. Based on the 700 MHz broadband waiver the project received from the FCC, LA-RICS has put together a comprehensive plan to develop a robust LTE network that provides advanced mobile data features with the reliability of a traditional public safety system. Within the LA-RICS region, this system will directly impact 1,483 Community Anchor Institutions (CAI), including 422 public safety sites.

LA-SafetyNet will provide a single, highly reliable broadband wireless data network dedicated to all police, fire, and EMS personnel throughout Los Angeles County. The 290-site LTE system will initially support more than 34,000 users, allowing emergency responders in the field to access and share high-speed, life-saving multi-media information via mobile devices.

LA-SafetyNet will provide LTE broadband services to first and second responders. The network will enable desktop extensions for users – allowing all of the applications currently used on existing wired networks to be delivered in the field. Computer-aided dispatch, law enforcement queries, real-time streaming video, medical telemetry, patient information and tracking, geographical information systems and a host of other applications will be supported by the network. In the event of regional event requiring mutual aid from outside Los Angeles County, responding agencies will be provided broadband network access on LA-SafetyNet. Additionally, it will provide Middle Mile broadband services via the fiber and microwave network that connects LTE base stations to the Core switching elements. Middle Mile access will be offered to fire, EMS, law enforcement, hospitals and other community anchor institutions throughout the Los Angeles County wireless service area.

LA-SafetyNet includes 290 LTE base station locations distributed to provide service throughout Los Angeles County. The base stations are interconnected via existing or new fiber or microwave links. To achieve highly reliable service, three redundant core network elements (Evolved Packet Cores) will be deployed at existing data centers. LA-SafetyNet is designed as a scalable wireless network architecture that can be seamlessly expanded to support increased capacity wherever needed. The project's network is also designed to be integrated into any future regional and national LTE efforts, such as the proposed Border Broadband Initiative.

The overall cost of the project is estimated to be $245,000,000. Of this amount, nearly $73,500,000 is cash and in-kind contributions, which results in a request for funding of $171,500,000. Of the total budget, $216,000,000 will be used toward the Last Mile system and $29,000,000 toward the Middle Mile system.

It is estimated that this project will generate 292 direct job years, 1,100 indirect job years and 789 induced job years. In addition, LA-SafetyNet will create a large, new market for public safety broadband software applications, which could result in substantial innovation and additional jobs that have not been quantified.